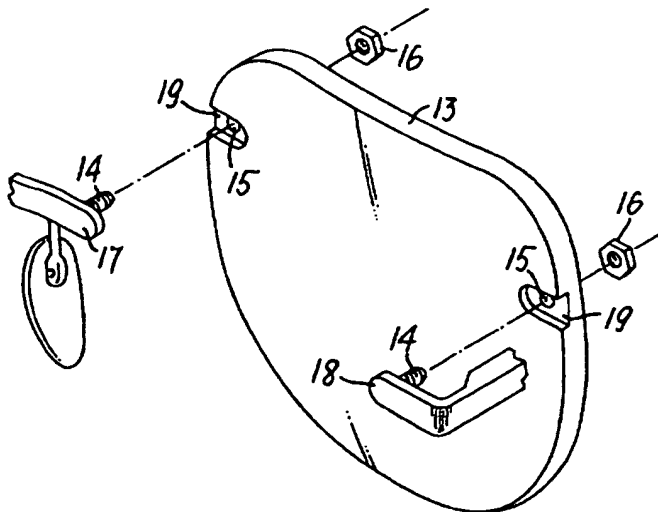




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(21) International Application Number: PCT/EP96/05288 (22) International Filing Date: 29 November 1996 (29.11.96) (30) Priority Data: GE95A000133 6 December 1995 (06.12.95) IT (71)(72) Applicants and Inventors: RATTARO, Armando [IT/IT]; Via delle Eliche, 69/24, I-16100 Genova (IT). RATTARO, Camillo [IT/IT]; Viale Villa Chiesa, 40 A/3, I-16155 Genova (IT). BOLDRINI, Pierino [IT/IT]; Salita Superiore Santa Tecla, 23, I-16132 Genova (IT). (74) Agents: PORSIA, Attilio et al.; Succ. Ing. Fischetti & Weber, Via Caffaro, 3/2, I-16124 Genova (IT).	(81) Designated States: CA, JP, RU, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.	

(54) Title: DEVICE FOR FASTENING THE NOSE BRIDGE AND THE TEMPLES TO LENSES OF EYEGLASSES OF THE RIMLESS TYPE



(57) Abstract

The device is intended for the fastening of the bridge (12, 22, 42) and of the two temples (11, 21, 41) to the two lenses (13, 23, 43) of eyeglasses of the rimless type in which the bridge presents two extremities (17, 27, 47) to be fastened to respective peripheral points on the two lenses and each temple presents one extremity to be fastened to a respective peripheral point of the pertaining lens. Each bridge and temple extremity is provided with at least one threaded shank or screw (14, 24, 44) intended to be inserted and pass through a corresponding bore (15, 25, 45) passing through the lens and suitable nut means (16, 26, 46) are provided to cooperate with the threaded end of the shank or screw passed through the lens. The said bore (15, 25, 45) is located at the bottom of a shaped recessed portion (19, 29, 49) obtained on one side of the lens and the said bridge and temple extremity is complementarily shaped with respect to the said recessed portion, so as to be at least partially inserted into said recessed portion matching the shape thereof.

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"Device for fastening the nose bridge and the temples to lenses of eyeglasses of the rimless type"

The present invention relates to a device for the fastening of the nose bridge and temples of eyeglasses of the rimless type. More particularly, the present invention relates to a fastening device for the bridge and the temples to lenses for eyeglasses of the rimless type, which consents to fasten at the desired angular positions the said temples and the bridge, so as to adapt the shape of the eyeglasses to the shape of the face of the wearer.

It is known that the temples and the nose bridge are fastened to the lenses of the eyeglasses of the so-called rimless type by means of pins or screws which are inserted into bores obtained on the said lenses; the screw together with its complementary nut locks the temple or the bridge in a fixed position onto the lens. Two or more bearing points of the bridge and of the temples are present in some models, at peripheral locations on the side of the lens, in order to avoid rotations of the bridge or of the temples around their fastening screw on the lens itself.

The suitable angular position to be imparted to the lens with respect to the nose bridge or to the temples is determined by the inclination of the bore and by the position of the mentioned bearing points on the lens into which there is inserted the mentioned fastening screw.

By acting in such a manner, the angular position between the plane of the lens, in the zone where the bore is obtained and the bore itself is not orthogonal at all times.

The fastening of the temples and of the bridge onto the lens takes place by inserting the said screw into the bore and by locking the bolt with the complementary nut.

Said known fastening systems present relevant inconveniences.

In some cases, due to the non-orthogonality of the bore with the plane of the lens, a too much forced tightening of the nut may lead to damage the lens itself. More generally, the use of the eyeglasses often involves torsions on the temples, which could act as a lever to generate veinings in the lenses, the whole being favoured by the cited absence of orthogonality between the lens and the bore.

Moreover, if the bearing points on the lens are not of the appropriate length, they can cause undesired movements of the bridge and of the temples along the edge itself of the lens. This may cause also the veining of the lens around the bore provided for the fastening of the screw.

Scope of the present invention is to obviate the mentioned inconveniences.

More particularly, the present invention relates to a fastening device for the nose bridge and temples to lenses

of eyeglasses of the rimless type, which consents to fasten in an easy manner, at desired angular positions, the said temples and the nose bridge, in such a manner as to adapt the shape of the said eyeglasses to the shape of the face of the wearer.

A further scope of the present invention is to realize a fastening device for the nose bridge and the temples to eyeglasses of the rimless type having features of remarkable strength and reliability in the course of time, obtained in an easy and economical manner.

These and other purposes hereafter specified are obtained by the device for fastening the nose bridge and the temples to lenses of eyeglasses of the rimless type which is object of the present invention, comprising screws provided on the nose bridge at both extremities thereof and on the bent extremities of the temples, which are inserted in at least a corresponding bore obtained on the lenses, characterized by the fact that the extremities of the nose bridge and the bent extremities of the temples, where the said screw are provided, are shaped in such a manner as to be inserted in perimetral slots or notches, obtained by a milling operation on one or both sides of the lenses, by perfectly matching the shape thereof.

These and further features of the device for fastening the nose bridge and the temples to lenses of eyeglasses of the rimless type will result better evidenced from the following detailed description, made with reference to the

Figures of the attached sheets of drawings, which represent some embodiments, by way of non-limiting example, of the invention itself, in which:

Figure 1 shows diagrammatically in perspective view a pair of eyeglasses provided with a device for fastening the nose bridge and temples to the lenses, according to the invention.

Figure 2 shows diagrammatically, in perspective and exploded view, a detail referred to one single lens, illustrating the fastening device according to a first embodiment of the invention.

Figure 3 shows diagrammatically a top view, with parts in section, of the detail of Figure 2 in assembled condition.

Figure 4 shows the same detail of Figure 3 with the parts not assembled as in Figure 2.

Figure 5 and 6 show diagrammatically, in perspective view, in the assembled and exploded conditions respectively, a detail referred to one single lens of the device according to a second embodiment of the invention.

Figure 7 and 8 show diagrammatically two top views, with parts in section, corresponding to Figures 5 and 6.

Figure 9 and 10 show diagrammatically, in perspective view, in the assembled and exploded conditions respectively, a detail referred to one single lens of a device according to a third embodiment of the invention.

Figures 11 and 12 show diagrammatically two top views, with parts in section, corresponding to Figures 9 and 10.

Figures 13, 14 and 15 show diagrammatically as many possible minor modifications to the device of the invention.

Figure 1 shows a pair of eyeglasses of the rimless type, presenting two lenses 13 connected at peripheral points by the two extremities 17 of the nose bridge 12. The two temples 11 are secured to peripheral points of each one of the two lenses by respective extremities 18 which present a bent portion.

With particular reference to Figures 2, 3 and 4, the device comprises threaded shanks or screws 14 which are provided on the nose bridge 12, at both extremities thereof, and at the bent extremity 18 of the temple 11, which screws are inserted in corresponding bores 15 obtained in the lens. The screws 14 are tightened each at the opposite side of the lens 13 by a complementary nut 16 inserted into a seat 116 having equal dimensions obtained in the rear side of the lens.

According to a fundamental feature of the present invention, both the extremities 17 of the bridge 12 and the bent extremity 18 of the temple 11, where there are provided the said threaded shanks or screws 14, are shaped so to as to be inserted into corresponding perimetral recessed portions or notches 19, obtained by milling operation on the lens 13. At the center of said notches 19 there are present the said bores 15, for the fastening of the bridge 12 and of the temple 11 onto the lens 13. The notches 19 are obtained on the lens 13 at a peripheral position, at opposed edges of same, with a side which opens on the said edges.

The bottom of the recessed portion or notch 19 is flat

and perpendicular to the axis of bore 15 and determines the angular position between the lenses and the bridge. As previously mentioned, the shape of the notch 19 is complementary to the shape of both extremities 17 of the bridge 12 and to the shape of the bent extremity 18 of the temple 11, so as to consent the coupling between the said elements.

With reference to Figures 5, 6, 7 and 8 there is shown the fastening device according to a second embodiment for the fastening of a temple 21 and of a nose bridge 22 to a lens 23.

More particularly, the device comprises screws 24 provided on the nose bridge 22, at both extremities thereof, and at the bent extremity of the temple 21, which are inserted in corresponding bores 25 obtained on the lens; the screws 24 are tightened each on the opposed side of the lens 23 by a complementary nut 26 inserted into a seat 126 of equal dimensions provided in the rear side of the lens.

Both extremities 27 of the bridge 22 and and the bent extremity 28 of the temple 21, where the said screws 24 are present, are shaped in such a manner as to be inserted in perimetral slots or recessed portions 29, obtained by milling operation on the lens 23. At the center of the said slots there are arranged the said bores 25, for the fastening of the bridge 22 and of the temple 21 onto the lens 23. The slots or recessed portions 29 are obtained on the lens 23 in peripheral position, at the opposed edges of

same.

The bottom of the recessed slot 29 is flat and perpendicular to the axis of the bore 25 and it determines the angular position between the lenses and the bridge. As previously mentioned the shape of the slot is complementary to the shape of both extremities 25 of the bridge and to the shape of the bent extremity of the temple 21, so as to consent the coupling between the said two parts.

The said bridge and temple extremities 27 and 28 comprise each a spacing disc 34 having shape and dimensions corresponding to the shape and dimensions of the slot 29. Said spacing disc 34 presents a bore 134 aligned with the bore 25 of the lens 23 and two recessed portions or grooves 234 for accommodating partially the wires or tubular sections 32 which realize respectively the bridge 22 and the temple 21. The fastening device is completed by a locking element 30 carrying the screw and presenting two recessed portions or grooves 130 for accommodating at least partially and locking the wire or tubular sections 32 in cooperation with the spacing disc 34.

With reference to Figures 9, 10, 11 and 12 there is shown a fastening device according to a third embodiment for fastening a temple 41 and a nose bridge 42 to a lens 43.

More particularly, the device comprises on the bridge 42, at both extremities thereof, and at the bent extremity of the temple 41, screws 44 presenting a locking head 144. The

screws 44 are inserted in corresponding bores 45 obtained on the lens 43. The screws 44 are tightened each on the opposed side of the lens 43 by a complementary nut 46 inserted in a seat of equal dimensions 146 in the rear portion of the lens.

According to a fundamental feature of the present invention both the extremities 51 of the bridge 42 and of the temple 41, are made of wire or tubular sections and loop-shaped in such a manner as to be inserted inside corresponding perimetral notches 49, obtained by milling operation on the lens 43. At the center of the said notches 49 there are obtained the said bores 45, for the fastening of the bridge 42 and of the temple 41 onto the lens 43. The notches 49 are obtained onto the lens 43 at a peripheral position, on opposed edges of same, with an open side on the said edge.

The bottom of the recessed notch 49 is flat and perpendicular to the axis of bore 45 and determines the angular position between the lenses and the bridge. As previously mentioned, the shape of the notch 49 is complementary to the shape of both extremities 51 of the bridge 42 and to the shape of the extremity 51 of the temple 41, so as to consent the coupling between the two parts.

Moreover, the screw 44 presents a substantially parallelepipedal non-threaded portion 50 located beneath the locking head 144 of the screw, around which portion there come to be arranged for the locking inside the notches 49

the terminal annular or loop portions 51 of the bridge 42 and of the temples 41.

With reference to all of the above described embodiments, the bottom of the recessed slot 29, concerning the second described embodiment, or of the notch 19, 49, concerning the first and the third described embodiment, may even present the cited bore with angular positions which are different from the preferred perpendicular angular position. This is determined by the facial lineaments of the wearer which must wear the eyeglasses, which may require this type of solution for the angular position between the bottom of the milled recessed portion and the axis of the bore.

From the above structural description of the device object of the present invention, it appears evident the utilization of same.

According to all embodiments of the device, the fastening is naturally ensured by the coupling of the screw 14, 24, 44 and of the nut 16, 26, 46. The bottom of the milled notch 19 and 49 in the first and third embodiment and the bottom of the slot 29 in the second embodiment, determine the angular position by which the nose bridge 12, 22, 42 and the temples 11, 21, 41 will be secured to the lenses 13, 23, 43.

Therefore, after having established the complete conformation of the eyeglasses, calculated upon the facial lineaments of the wearer, it is possible to create the notches in the first case and the slots in the second case

with the suitable angular position.

For the said operation a machine tool can be used, for example of the type disclosed in European patent Application EP-A-0 739 683.

From the above description of the structural and functional features of the device object of the present invention, the already mentioned advantages are even more evidenced. In fact, by having the possibility of orientating in a precise and easy manner the bridge and the temples, without the risk of damaging the lenses, there can be obtained eyeglasses which are very comfortable and arranged on the wearer's face in the exact position to consent the best sight.

The invention as above described and hereafter claimed has been illustrated by way of mere example, it being understood that same is subject to modifications and variations which however will fall within the limits of the same inventive concept.

For example, the extremities of the temples and of the nose bridge can be shaped with different shapes so as to avoid the rotation of same with respect to the lens. As shown in Figure 13 the cited screw, moreover, can present its stem 514 which is eccentric with respect to the head 515, so as to avoid the rotation of the temple or of the bridge locked by same onto the lens.

The shape of the slots presents different configurations which are as well advantageous; for example, the bottom surface can be V-shaped or round as indicated respectively in Figures 14 and 15 by reference numerals 602 and 702. Therefore, the elements 601 and 701 which are inserted inside said slots or notches are shaped in a manner corresponding to the said bottom.

Finally, the sides of the milled portion can present different profiles and inclinations, having a shape in any case corresponding to the side walls of the elements which are inserted inside the said milled portion.

Lastly, there are possible structural inversions or alternative positionings of the components which form as a complex the fastening device for the nose bridge and the temples to lenses of eyeglasses, object of the present invention.

CLAIMS

1) A device for the fastening of the bridge (12, 22, 42) and of the two temples (11, 21, 41) to the two lenses (13, 23, 43) of eyeglasses of the rimless type in which the bridge presents two extremities (17, 27, 47) to be fastened to respective peripheral points on the two lenses and each temple presents one extremity to be fastened to a respective peripheral point of the pertaining lens, each bridge and temple extremity being provided with at least one threaded shank or screw (14, 24, 44) intended to be inserted and pass through a corresponding bore (15, 25, 45) passing through the lens, suitable nut means (16, 26, 46) being provided to cooperate with the threaded end of the shank or screw passed through the lens,

characterized by the fact that

the said bore (15, 25, 45) is located at the bottom of a shaped recessed portion (19, 29, 49) obtained on one side of the lens and the said bridge and temple extremity is complementarily shaped with respect to the said recessed portion, so as to be at least partially inserted into said recessed portion matching the shape thereof.

2) A device according to claim 1, characterized by the fact that the recessed portion has the shape of a slot (29).

3) A device according to claim 1, characterized by the fact that the recessed portion has the shape of a notch (19, 49) opening on the edge of the lens.

4) A device according to claim 1, characterized by the fact that the axis of the bore (15, 25, 45) is perpendicular to the bottom of the recessed portion (19, 29, 49).

5) A device according to claim 1, characterized by the fact that the axis of the bore (15, 25, 45) is anyhow inclined with respect to the bottom of the recessed portion (19, 29, 49).

6) A device according to claim 1, characterized by the fact that the said bridge and temple extremity (27, 28) comprises a spacing disc (34) having shape and dimensions corresponding to the shape and dimensions of the slots (29) or notches (19, 49), said spacing disc (34) presenting a bore (134) aligned with the bore (25) of the lens (23) and at least one recessed portion (234) for accomodating partially a wire or tubular section (32) of the said bridge and of the said temples, a locking element (30) carrying the screw (24) being provided which presents at least one corresponding recessed portion (130) for accomodating at least partially and locking the said wire or tubular section (32) in cooperation with the said spacing disc (34).

7) A device according to claim 6, characterized by the fact that the said locking element (30) incorporates integrally the said wire or tubular section (32) of the bridge and of the temples.

8) A device according to claim 3, characterized by the fact that the said bridge and temple extremity (47, 48)

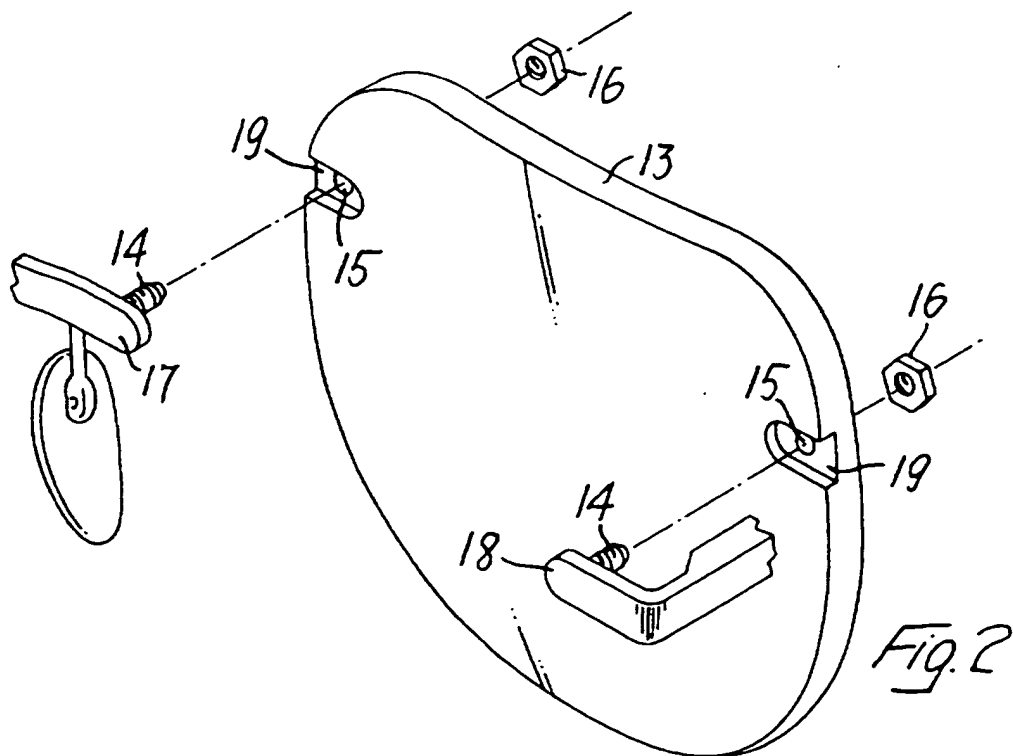
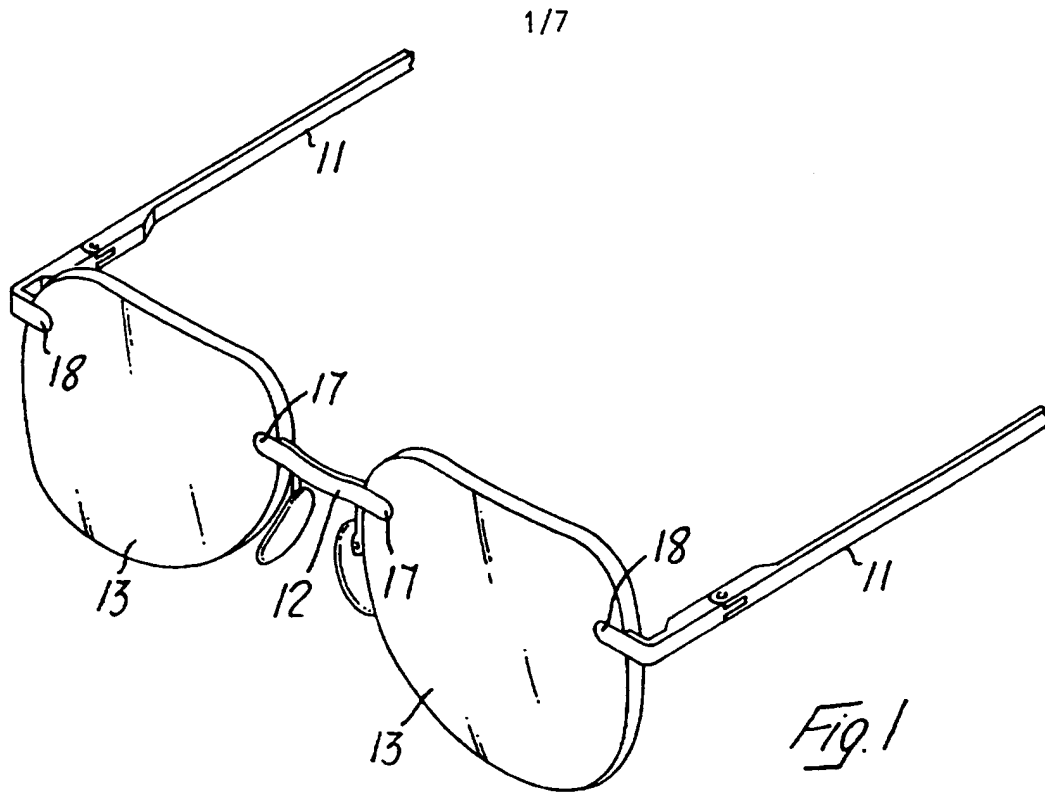
comprises a wire or tubular section (51) which is bent into a semi-annular or looped portion so as to be exactly located inside the notch (49), a locking element carrying the screw (44) being provided presenting a head portion (144) for locking the said bent wire or tubular section inside the notch.

9) A device according to claim 8, characterized by the fact that the said locking element presents a substantially parallelepipedal non-threaded element (50) located beneath its head (144), which is intended for being inserted with a snug fit inside the said semi-annular or looped portion.

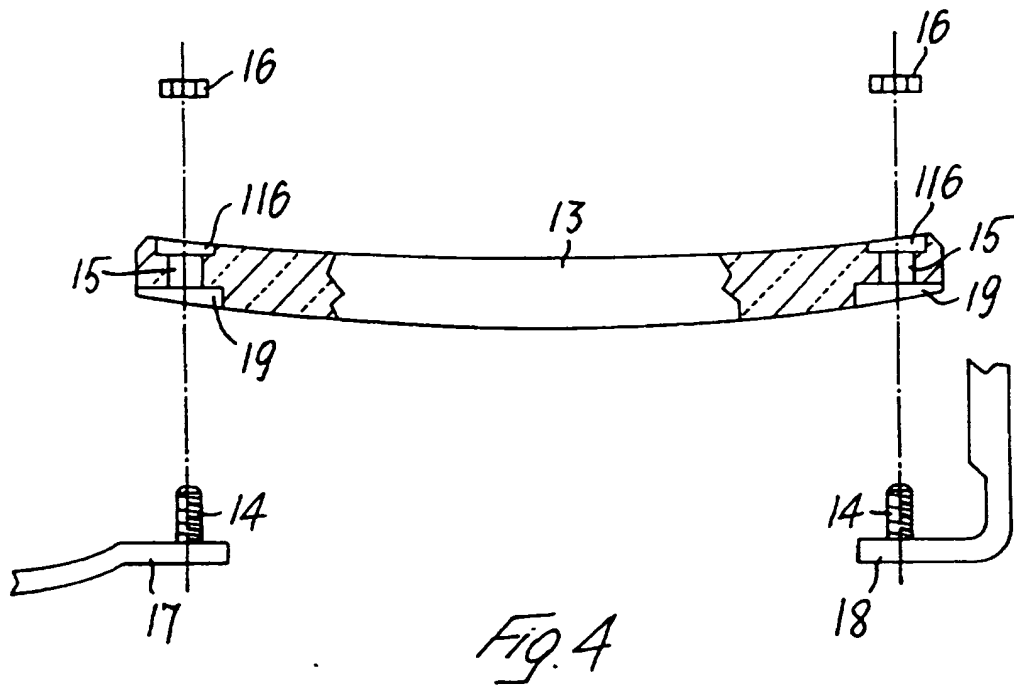
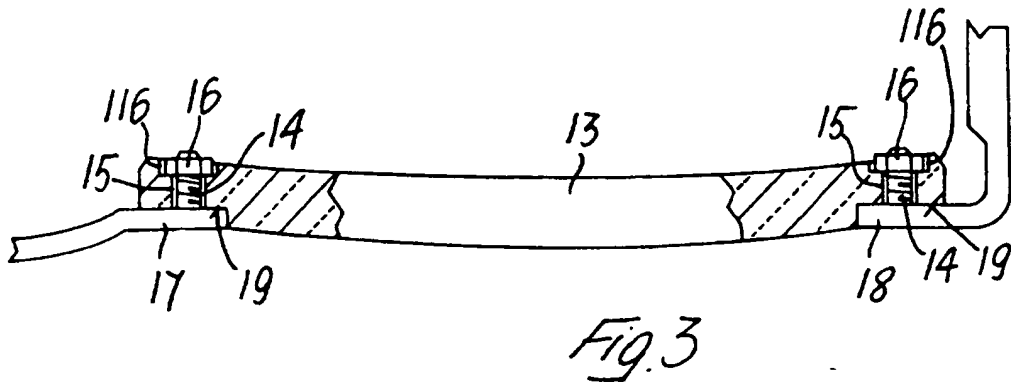
10) A device according to claim 1, characterized by the fact that the bottom of the shaped recessed portion (19, 29, 49) is flat.

11) A device according to claim 1, characterized by the fact that the bottom of the shaped recessed portion is shaped as a non-flat surface (602, 702).

12) A device according to claim 1, characterized by the fact that the nut means (16, 26, 46) cooperating with the threaded end of the shank or screw (14, 24, 44) passed through the lens are at least partially housed in a second recessed portion (116, 126, 146) obtained on the other side of the lens and the bottom of said second recessed portion is substantially parallel to the bottom of the recessed portion (19, 29, 49) obtained on the said one side of the lens.



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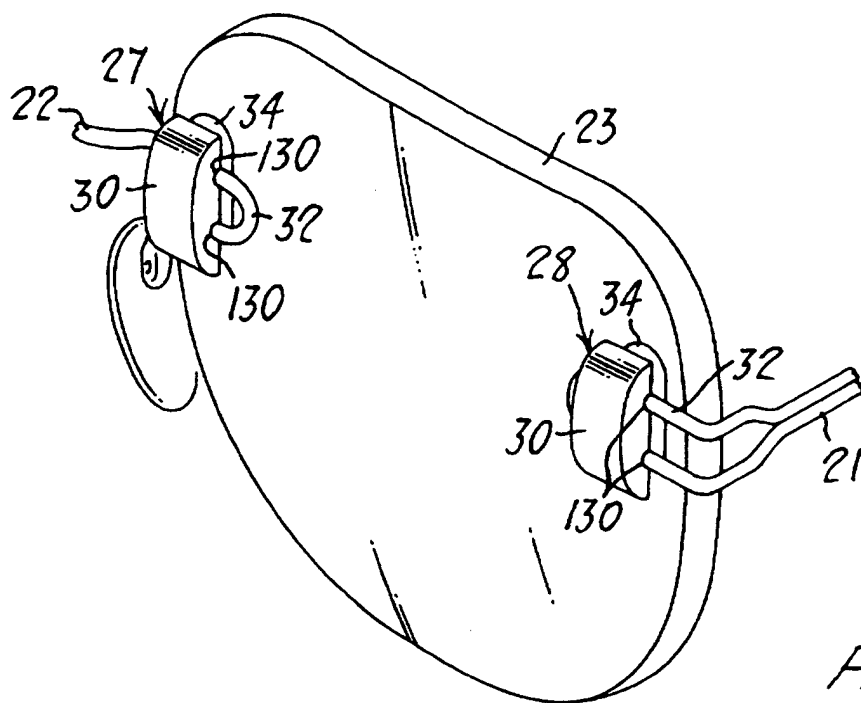


Fig. 5

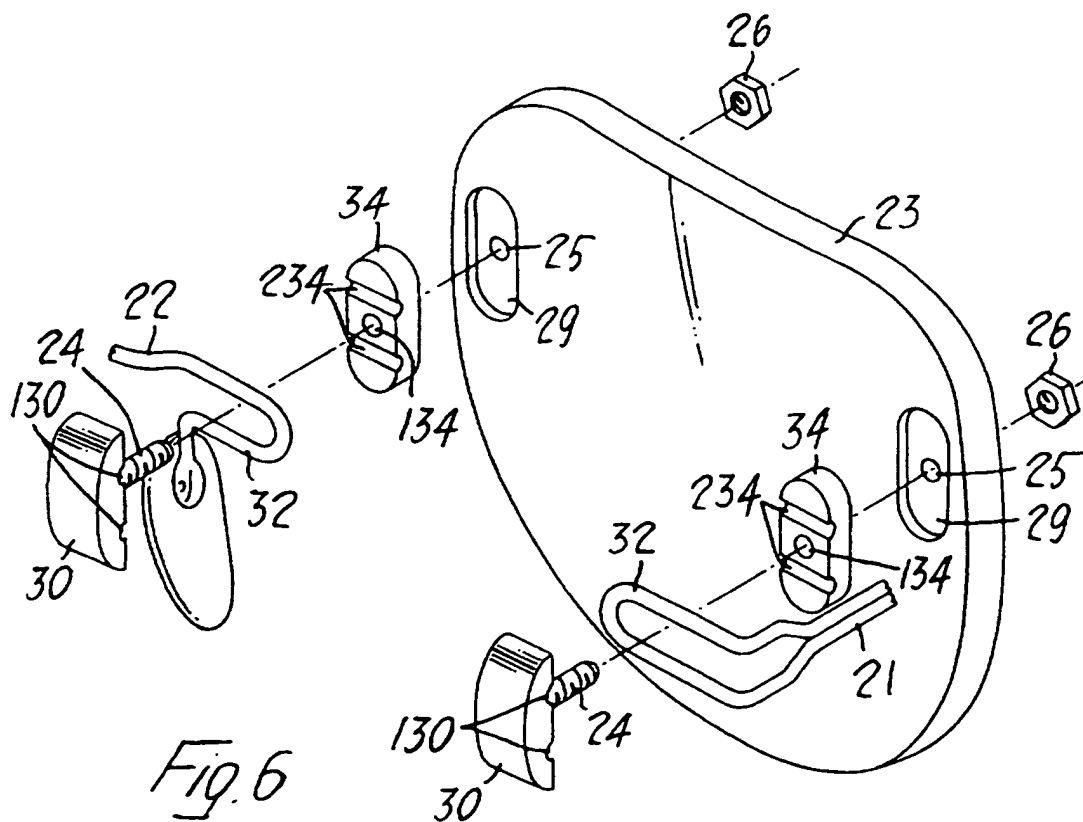
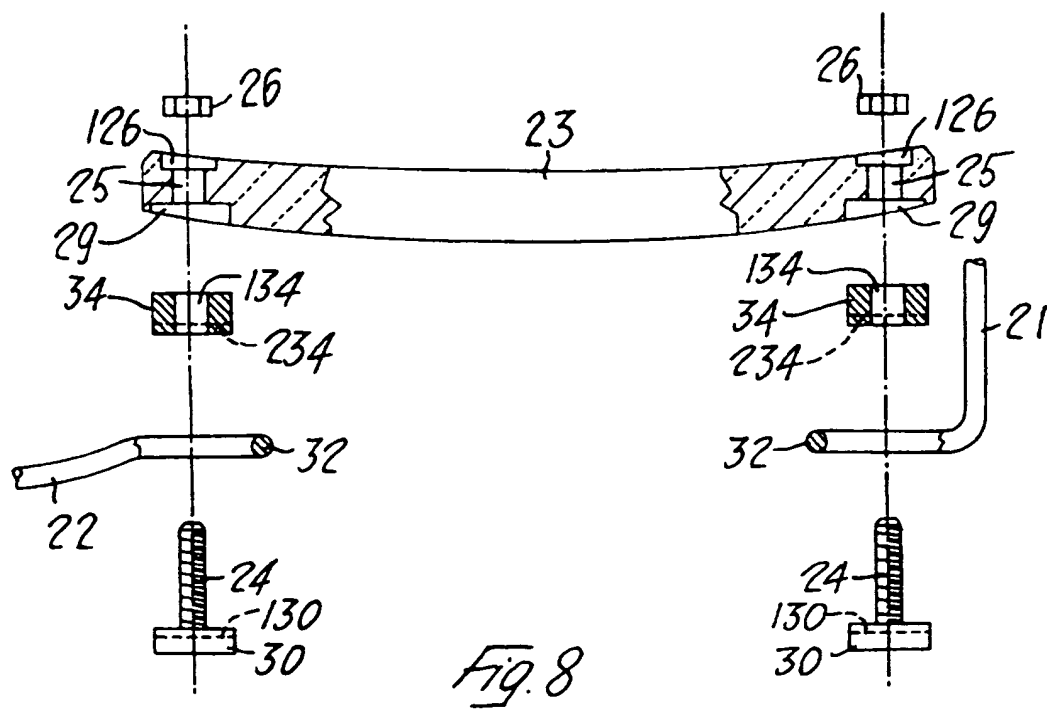
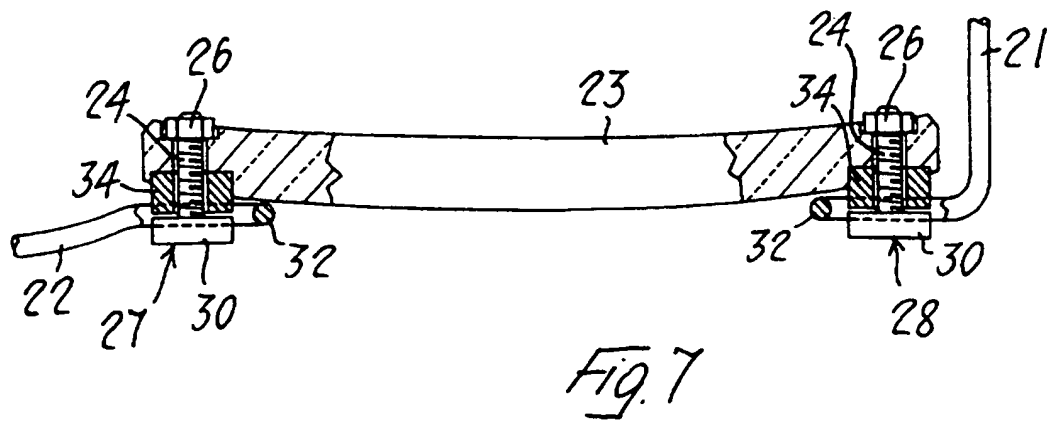
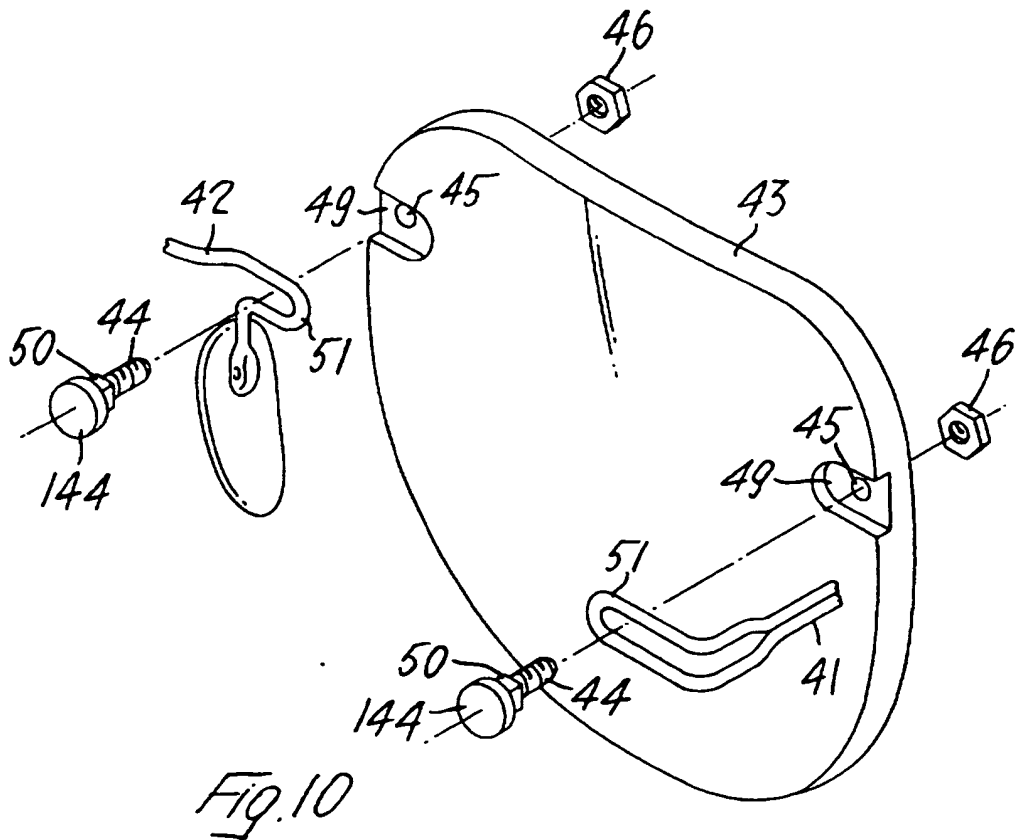
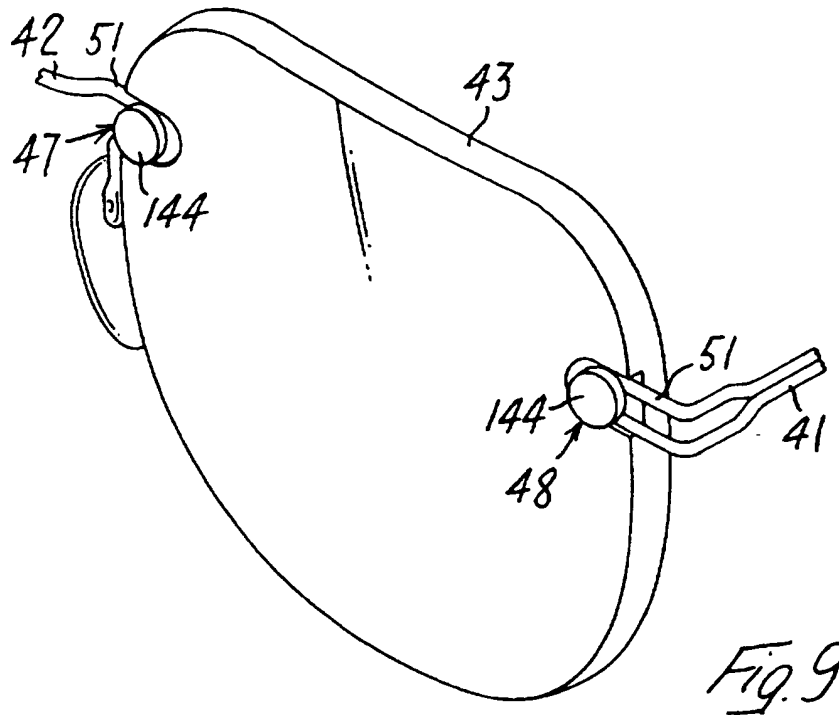


Fig. 6

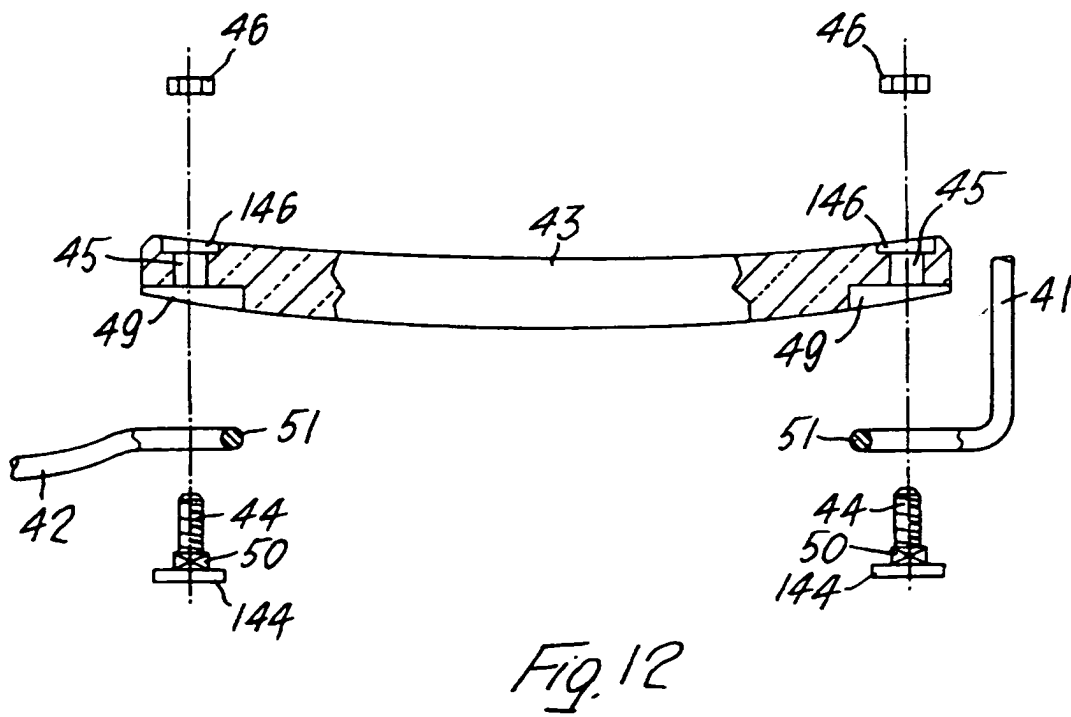
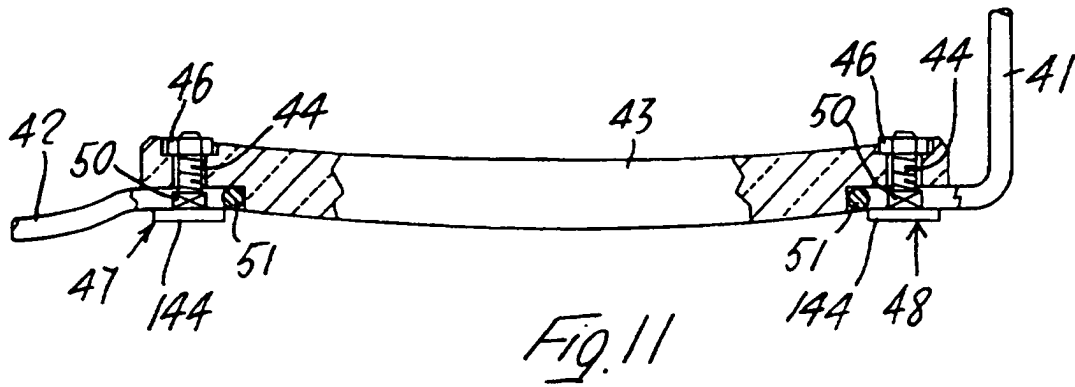
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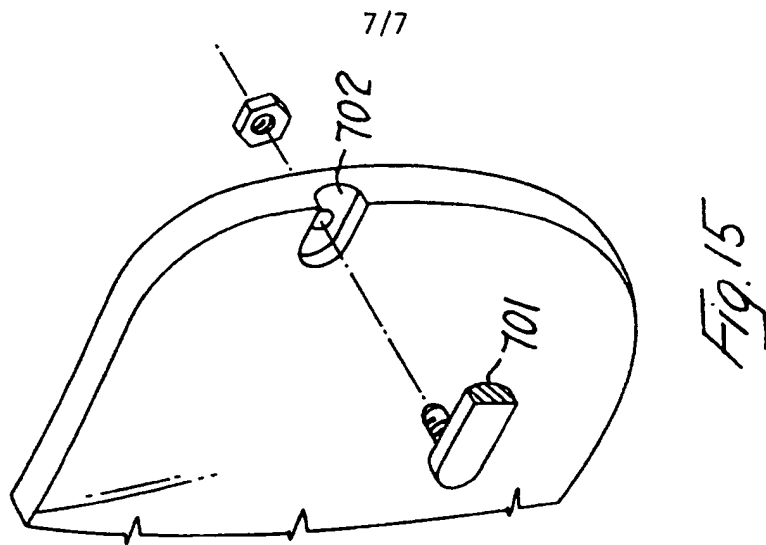
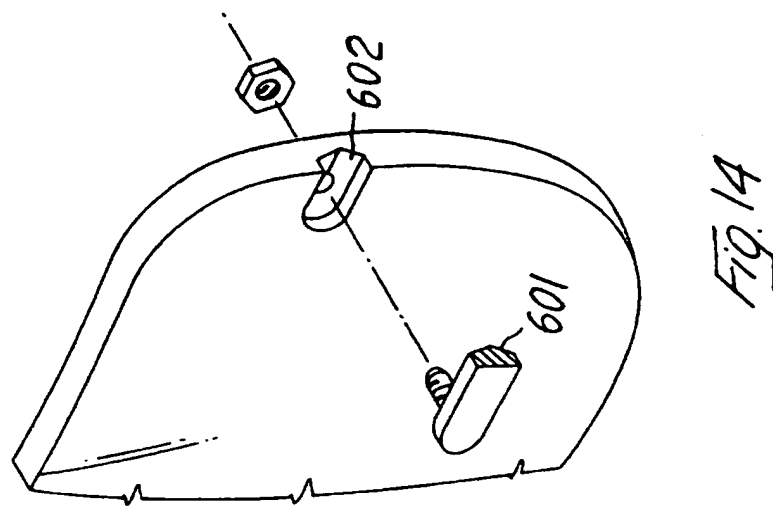
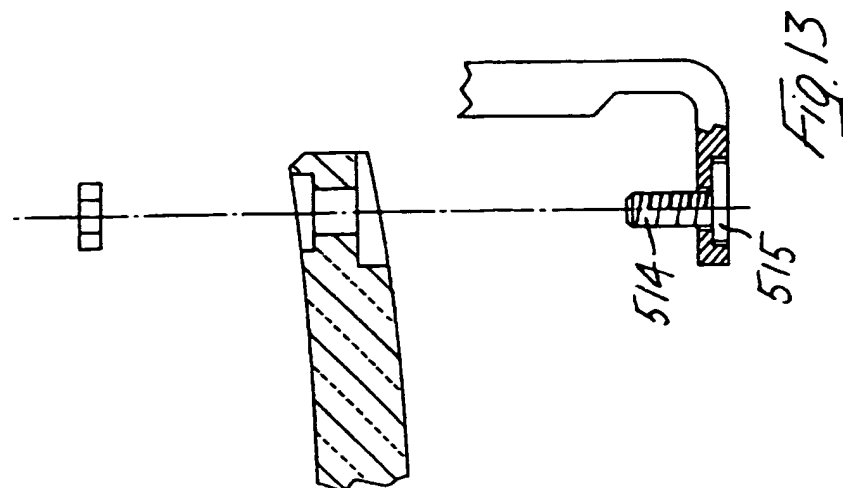


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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 96/05288

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G02C1/02

According to International Patent Classification (IPC) or to both national classification and IPC

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IPC 6 G02C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 96 33438 A (PRO DESIGN INTERNATIONAL A S ;HANSEN FLEMMING BO (DK); BUCK KIM (D) 24 October 1996 see abstract; claims ---	1-3,8
A	EP 0 666 490 A (KOBAYASHI MITSUO) 9 August 1995 see column 12, line 9 - column 15, line 20; figure 33 ---	1-3,6, 9-11
A	EP 0 661 575 A (KOBAYASHI MITSUO) 5 July 1995 see abstract; claims ---	1,6,9
P,A	WO 96 02014 A (BOTTEGA D ARTE IN FIRENZE S R ;FORTINI PAOLO (IT)) 25 January 1996 see claims --- -/--	1,7-9

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 661 576 A (KOBAYASHI MITSUO) 5 July 1995 see abstract; claims ---	1,8
A	WO 92 08158 A (HOUMAND JAN) 14 May 1992 see claims ---	1
A	GB 2 274 728 A (MURAI COMPANY LIMITED) 3 August 1994 see claims -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 96/05288

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO-A-9633438	24-10-96	AU-A- 5397096	07-11-96
EP-A-0666490	09-08-95	JP-A- 7218871 US-A- 5450141	18-08-95 12-09-95
EP-A-0661575	05-07-95	JP-A- 7234383	05-09-95
WO-A-9602014	25-01-96	AU-A- 1465295 EP-A- 0721134 EP-A- 0717301	09-02-96 10-07-96 19-06-96
EP-A-0661576	05-07-95	NONE	
WO-A-9208158	14-05-92	AT-T- 109573 AU-B- 649087 AU-A- 8860491 DE-D- 69103278 DE-T- 69103278 EP-A- 0554341 ES-T- 2059159 JP-B- 7074864 JP-T- 6502259 US-A- 5471257	15-08-94 12-05-94 26-05-92 08-09-94 24-11-94 11-08-93 01-11-94 09-08-95 10-03-94 28-11-95
GB-A-2274728	03-08-94	EP-A- 0611978 WO-A- 9402876	24-08-94 03-02-94

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